# Journal of Buddhist Ethics

ISSN 1076-9005 http://blogs.dickinson.edu/buddhistethics/ Volume 30, 2024

# Phases of the Buddhist Approach to the Environment

Johannes Cairns

University of Helsinki

Copyright Notice: Digital copies of this work may be made and distributed provided no change is made and no alteration is made to the content. Reproduction in any other format, with the exception of a single copy for private study, requires the written permission of the author. All enquiries to: <a href="mailto:vforte@albright.edu">vforte@albright.edu</a>.

# Phases of the Buddhist Approach to the Environment

Johannes Cairns 1

#### **Abstract**

Various typologies of Buddhist ecophilosophies have been proposed but they have overlooked temporal dynamics and the relationship between beliefs and practice. I address this research gap by proposing a three-tier diachronic scheme. The first premodern phase featured a mixed bag of attitudes and behaviors in relation to ecology, with some being supportive of environmental ethics and others subversive. The second phase arose with the early counterculture environmental movement and consisted of ecophilosophies and activism with limited influence. The third phase started in the mid-1990s with political acknowledgement of the ecocrisis and has gained momentum. It consists of global adoption of ecophilosophies and environmental practices, including conservative Asian organizations, and new radical ecology. The dynamics indicate that a tradition

<sup>&</sup>lt;sup>1</sup>Faculty of Theology and Organismal and Evolutionary Biology Research Programme, University of Helsinki, Helsinki, Finland. Department of Biology, University of Turku, Turku, Finland. Email: johannes.cairns@helsinki.fi.

of accommodating to prevailing political paradigms may have obstructed Buddhist environmentalism in the past but could facilitate it in the future.

### Introduction

The relationship of Buddhism to the environment has aroused lively discussion among Buddhists and academicians in the global North since the late 1960s. Especially since the late 1980s, Asian Buddhists have also increasingly addressed environmental issues. These discussions have coincided with the emergence of environmental awareness and movements in these regions and globally.

The discussion has had a distinct philosophical emphasis. Ethnographic research on the topic has been conducted primarily in the Himalayan region and Southeast Asia since the 1990s. Social and behavioral studies on the topic are even more fragmentary, infrequent, and recent. The need to include not only doctrinal deduction but also empirical observations on inspecting the Buddhist stances on the environment is highlighted by the complex relationship between human thought and behavior, including in the realm of religion and ecology (see e.g. Haluza-DeLay 2014, Jenkins 2008). Ecophilosophies promoted by religious leaders or intelligentsia may not reflect more widespread attitudes and environmental attitudes may not translate into behavioral practices. Moreover, external pressure to develop environmental practices can causally promote ecophilosophies, not only vice versa (Koehrsen & Huber 2021).

In philosophical discussions, several taxonomies of Buddhist ecophilosophies have been proposed. In 1994 and 1995, Ian Harris proposed two sets of four-tiered classifications of Buddhist ecophilosophies (Harris 1990, 1995), and in 2006, Donald Swearer proposed a five-tiered

classification (Swearer 2006). The taxonomies form continua from uncritical endorsement to downright rejection of Buddhist environmental ethics, with various more nuanced approaches in between. The latter include stressing the environmental implications of Buddhist ethics relative to Buddhist ontology (subject to more pronounced critique), and explicitly constructive approaches to formulating Buddhist environmental ethics instead of claims of traditional authenticity. However, these taxonomies need to be reworked in the light of a wider body of research, including empirical work, much of which has emerged after their publication.

Here I argue that a wider reading stretching until today clearly demonstrates a temporally dynamic nature of the Buddhist stances on the environment. The analysis delineates three primary historical phases in the development of the Buddhist stances on the environment: (1) A premodern phase where traditional Buddhist views and practices were not framed according to contemporary ecological concepts and concerns and had a mixed bag of effects in relation to them; (2) an early environmentalist phase starting in the 1960s where Buddhist inspired ecophilosophies began to be developed in response to current ecological concepts and concerns particularly as part of the counterculture movement in the global North and among the intelligentsia; (3) a more mainstream environmentalist phase where ecophilosophies and related practices have been increasingly adopted by Buddhists across the world and where environmentalism can bring Buddhist organizations image benefits. The analysis suggests, in particular, a current state differing from the states previously described. While I do not refute the utility of synchronous typologies of Buddhist ecophilosophies, I contextualize them as originating in one part of this diachronic typology and suggest that debate about whether an authentic Buddhist environmental ethic can be construed has become a

 $<sup>^{2}</sup>$  In Swearer's (2006) scheme, these are represented by the Eco-Ethicists and Eco-Constructivists, respectively.

purely speculative question. I argue that in this zeitgeist Buddhism must respond to the environmental crisis, both in ideology and practice, to survive and to thrive.

### Study Positioning and Methodology

This study is positioned within the study of religion and the environment, an emerging field of study within religious studies. A key theme of interest within the field is to understand how religions respond to current environmental problems. This is an extremely important topic from a normative perspective, taken the current climate emergency, as the response of religions affects the views and behaviors of most of humanity.

In the case of Buddhism, the effect covers hundreds of millions of Buddhists globally as well as the larger-scale effect of the views of influential Buddhists such as the Dalai Lama on humanity through the media. Such analysis of the religious response need not entail misreading the context of historical religious views and practices regarding the environment. These other contexts and purposes can be openly acknowledged, and still those views and practices will have ecological implications important for today's environmental concerns. For instance, monastics living simply with scarce resources and without having children contributes to environmental sustainability regardless of whether the lifestyle was developed with that in mind. Moreover, lay people building and maintaining large and luxurious temples to make spiritual merit contributes to the current problem of overconsumption regardless of whether overconsumption as an environmental issue was acknowledged in premodern Buddhist cultures.

The primary research conducted for this study is a conceptual historical analysis. The analysis is based on interdisciplinary reading in the

fields of Buddhist studies, Asian studies, religion and ecology, ethics, and environmental studies, including philosophical, historical, philological, ethnographic, and sociological work. This allows examination of the Buddhist stances on the environment over time through the interplay of ideology, attitude, and behavior. The reading seeks breadth over time and discipline but does not claim to be comprehensive due to the vast amount of scholarly publications on this theme.

The specific research question is: What are the major historical developments in the Buddhist stances on the environment with respect to current conservationist and sustainability concepts and concerns? The analysis goes beyond a literature review through the development of a novel diachronic typology of Buddhist stances on the environment that complements previously proposed synchronous typologies (Harris 1994, 1995; Swearer 2006). The diachronic typology allows new perspectives on Buddhist and Buddhist-inspired ecophilosophies and modes of activism as they historically relate to each other and other cultural ideologies, attitudes, and behaviors. Moreover, importantly, a dynamic view of Buddhist environmentalism allows assessing its practical implications for mitigating the impending environmental crisis now and in the coming decades.

# Premodern Environmental Attitudes and Practices Lacking Current Conceptual Framework

The premodern phase in the Buddhist environmental stances is characterized by a lack of the current fields of ecology and conservation as well as the postindustrial social context and environmental crisis. Therefore, it can be considered to have lasted from the origin of Buddhism some 2,5 millennia ago until the environmental awakening of the 1960s, thereby stretching into modernity. During that time, the relationship between Buddhism and the environment was based on Buddhist doctrine and

lifestyle in interaction with various local beliefs and practices as Buddhism spread across Asia and developed for over two millennia. The ideologies and practices are a mixed bag in relation to current concepts and concerns of conservation and sustainability, which did not exist at the time.<sup>3</sup> In this context, the role of Buddhism in promoting harmlessness emerges as an exceptionally prominent question.

Buddhism, which emerged in Northern India some 500 years BCE, widely adopted the philosophy of harmlessness (Skt. *ahiṃsā*) possibly deriving from as far as the Indus Valley Civilization (3300–1300 BCE). This was reflected in the teachings and ethical precepts of the Buddha as the encouragement to avoid the intentional killing or harming of animals, in particular, but also insects and even plants in certain cases. The prohibitions were supplemented by the encouragement to develop loving kindness and compassion toward all sentient beings (Chapple 1993: 22–42). Other animals were deemed inferior to humans in that being born as an animal was considered a sign of unskillful behavior in previous lives and it being near-impossible for animals to practice Buddhism. However, humans were considered similar to other animals in terms of the possibility of being born as one another in the cycle of rebirth and possessing similar basic characteristics, such as a desire to avoid suffering and experience happiness (Chapple 1993: 22–42; Sciberras 2008).

The teachings describe the negative karmic consequences of killing animals and the positive karmic consequences of protecting life. Therefore, cultivating harmlessness also held considerable significance regarding personal and household concerns for the afterlife, material prosperity, and physical welfare. Following his conversion to Buddhism, Emperor Aśoka (304–232 BCE) of the Maurya Dynasty, the first dynasty to unite the Indian peninsula, issued decrees to minimize the unnecessary

<sup>&</sup>lt;sup>3</sup> For discussion of the problem of imposing contemporary ecological concepts on historical Buddhism, see e.g. Huber 1991; Huber & Pedersen 1997; Sciberras 2008.

killing of animals and to promote animal welfare (including drinking and medical stations). Buddhism is also considered to have played a key role in the later widespread adoption of harmlessness practices such as vegetarianism in the dominant Brahmanical tradition and its various yogic offshoots (Chapple 1993: 22–42).

By spreading harmlessness ideology and practices, Buddhism might be expected to have had considerable conservationist effects, judging from a contemporary conceptual framework, in the Indian peninsula and other regions where Buddhism reached prominence. Laws prohibiting hunting in certain regions or on Buddhist sacred days were also issued, for instance, in Tibet and East Asia (Huber 2003). In China, the Buddhist doctrine was, already at an early point, interpreted as necessitating vegetarianism among the monastics, a custom which spread across East Asia (Greene 2016). A ritual of buying animals captured for slaughter to release them back into nature also developed in China and spread across Buddhist Asia (Darlington 2017).

Both the motives of harmlessness practitioners and the concrete environmental benefits of the practices have, nevertheless, been called into question. Instead of internalized ethics of compassion alone historical documents indicate a key motivation for the actions, including laws decreed by rulers, was the accumulation of good karma or merit (Skt. puṇya) to ensure a good rebirth, material prosperity and physical health for the actor and their kin (Huber 2003). In Tibet, for instance, the custom developed to purchase an animal for release from the slaughterhouse after receiving a bad fortune (Darlington 2017). Throughout Asia, economic opportunists also began to capture animals specifically to be sold for release, which removes the conservationist effect of the action even if not affecting the moral stance of the Buddhist practitioner unaware of the exploitation (Darlington 2017).

More generally, it is unclear to what degree the harmlessness ideologies and practices recommended by the Buddhist religious elite or proclaimed by Buddhist rulers were adopted by the wider community. In Tibet, for instance, hunting and mining continued to be practiced despite Buddhist inspired prohibition laws (Huber 1991, 2003). Practical economic considerations relevant to human survival and success in each region and time are likely to have always played a key role in behavioral practices relative to Buddhist influences. The behavioral practices adopted would be accompanied by the necessary ideological adjustments, compromises, or sacrifices.

Furthermore, the influence of Buddhism may not have dominated relative to other local beliefs and cultural features. Importantly, geopiety including the avoidance of damaging particular landscape formations and regions to avoid physical retribution and bad fortune cast by infuriated local deities, has been widespread globally, including Buddhist Asia (Darlington 2019a; Esler 2017; Huber 1991; Huber & Pedersen 1997; Smyer Yü 2014). In the Himalayan region, for instance, geopiety is still today a much more important motive for conservation-like behavior than traditional Buddhist ethics (Gaerrang 2017; Woodhouse et al. 2015: 304). This could indicate a relatively weak role for Buddhist harmlessness ideologies and practices in the everyday lives of Asian Buddhists in the past as well.

Buddhism has been described as supportive of environmental sustainability. Blindly chasing after material desires is connected to suffering and letting go of craving to spiritual enlightenment; monks and nuns lead materially modest, celibate lives (not contributing to overpopulation); and monastic culture has tended to foster thrifty use of resources (Barnhill 2004; Kaza 2003.). Indeed, it is acknowledged that Buddhist monastic lifestyle and ideology have influenced the contemporary movements of voluntary simplicity, downshifting and lifestyle minimalism, where reducing consumption and simplifying lifestyles are connected to both

environmental sustainability and increased mental, physical, and spiritual well-being (Boujbel ja d'Astous 2012; Gregg 1936; Hook et al. 2021; Osikominu & Bocken 2020; Rebouças & Soares 2021).

However, already at the time of the Buddha a division of labor was established between the monastic minority and lay majority whereby a primary spiritual obligation of lay followers was material support of the monastics devoted to the realization of Buddhism's loftier and deeper virtues. Providing such material support was considered a major virtue of generosity itself, leading to the accumulation of much merit. To be able to perform this task, it was necessary to accumulate and skillfully manage material property, including spending some of that property on worldly items and entertainments to keep the household happy and balanced, something on which the Buddha himself provided advice (see e.g. Sigālovāda 2013).

Moreover, many of the supporters of the Buddha and later Buddhist monastics and temples were wealthy merchants or rulers with considerable property accumulation and consumption practices. In fact, material prosperity came to be seen as a fruit of past merit making among the Buddhist laity, as it, in turn, allowed generating major additional merit by actions of material generosity such as funding the construction of large temple complexes (Gaerrang 2017). High material activity levels are of necessity connected to large-scale use and exploitation of natural resources. Therefore, traditional Buddhist ideologies (virtue ethics and doctrine of karma) and practices (in particular, monastic versus lay life modes) represent a mixed bag when judged from contemporary conservationist and sustainability perspectives.<sup>4</sup>

<sup>&</sup>lt;sup>4</sup> Especially East Asian Buddhism, most of all the Chan (Ko. Seon, Jap. Zen) school, has been connected to contemporary conservationist and sustainability concerns owing to an emphasis on prudent use of resources in the monastic culture and an important role

## Emergence of Ecophilosophies Among Counterculture Elite Following 1960s Awakening

The global North and global intellectual circles experienced an environmental awakening in the 1960s triggered by visible ecological signs of pollution<sup>5</sup>, followed by the acknowledgement of natural resource limits for the prevailing infinite growth based economic model<sup>6</sup>. One reason proposed for the environmental crisis was the idea of human dominion over nature found in Abrahamic religions. Perceiving nature and humans as separate and the former as having been specifically created as a resource for the latter were considered pivotal root causes for human activity leading to the degradation of natural environments and overexploitation of natural resources.

A central figure in the discussion was the historian Lynn White who suggested that Asian religions, particularly Buddhism, are better for the environment owing to their more holistic take on the human-nature

played by nature in spiritual texts. However, historical documents fail to show an awareness of contemporary concerns underlying these cultural features. Prudent use of resources was connected to economic behavior and thriftiness being considered a monastic virtue rather than awareness of a negative environmental impact of unnecessary resource use. Closeness to nature, in turn, was connected to Chinese stylistic conventions in prose and poetry, and to the use of nature to provoke insights and enlightenment, rather than to an expressed sense of concern for the well-being of nature. This explains why environmental behavior was conflicting from the standpoint of contemporary concerns, including clearing reclaimed land in pristine forests and mountainous regions to build temples (Sørensen 2013, 103–104).

<sup>&</sup>lt;sup>5</sup> The publication of Rachel Carson's book *Silent Spring* (focusing on the problems of large-scale pesticide use) in 1962 is considered a landmark event in the environmental awakening.

<sup>&</sup>lt;sup>6</sup> The first report of the Club of Rome (group of leading politicians, business executives and scientists), *The Limits to Growth*, brought the issue of natural resource depletion into the limelight upon its publication in 1972. For an overview on the environmental awakening, see e.g., Radkau 2014.

relationship (White 1967). The interest in Buddhism and the environment reflected in White's approach can be traced a century back to the American Transcendentalists, who displayed an interest in both Asian religions and nature appreciation (Nash 1989: 113–114). Another source of influence were the popular writings of D. T. Suzuki and his student Alan Watts in the West in the mid-20th century, both comparing Eastern and Western perceptions of nature. While the historical accuracy of White's arguments has remained a contested topic, his contributions have had a considerable influence on environmental ethics, environmental theology, and research on religion and ecology (Whitney 2013).

Following White, during the next three decades, Western Buddhists and Buddhists scholars developed several Buddhist ecophilosophies largely based on his premise. The discussion developed in conjunction with the emergence of deep ecology with bidirectional influences (see e.g. Anker 2020: 75–91; Barnhill 1997; Henning 2002; Kvaløy 1987; Næss 1973). In practice, the development of early ecophilosophies was reflected in the adoption of environmental policies in some Western Buddhist centers as well as sporadic cases of Western Buddhist environmental activism (e.g. anti-pollution, -logging and -nuclear; Kaza 1997, 2003). The discussion mainly originated from politically progressive figures from the global North representing the counterculture movement. Starting from the 1980s, the discussion was joined by leading international Asian Buddhist figures actively interacting with the Western liberal elite, such as the Dalai Lama and Thich Nhat Hanh.

Key U.S. West Coast liberal progressive figures developing early Buddhist ecophilosophies include Gary Snyder and Joanna Macy. Gary

<sup>&</sup>lt;sup>7</sup> Notably, in addition to the development of general Buddhist-inspired ecophilosophies, the discussion also entailed use of Buddhist elements in various more specific policy reform ideologies, such as use of Buddhist village-based economics as a baseline for economic reform (Schumacher 1973).

Snyder studied Zen Buddhism in Japan in the mid-20th century and is a globally renown counterculture and environmental poet. Based on Zen and other ideological influences, he developed his own form of bioregionalism, reinhabitation. In this model, a person intentionally reinhabits neglected or overexploited land and seeks to create an environmentally and economically tenable lifestyle in intimate connection with the local natural surroundings and community. Central among the Buddhist influences is the cultivation of a tangible sense of interconnectedness, a doctrine emphasized in Mahāyāna Buddhism, with all living and non-living phenomena, through sensory and psychological contact with one's immediate living environment. Snyder also reconceptualized the concept of Sangha, often widely understood as the community of Buddhist practitioners, as the even wider community of all beings inhabiting a region. Furthermore, seeking to live in proximity and harmony with nature echo themes of East Asian Zen monastic and literary culture. Buddhist insight co-occurs with an environmentally sustainable lifestyle and is conceptualized at an ecosystem level. This represents a merging of Buddhism with contemporary ecological concepts, deep ecology philosophy, as well as Transcendentalist and American motives of exploring and seeking a better life in the US wilderness (Kaza 2003, 2006; Kraft 1994; Strain 2016).

Joanna Macy has created her own unique blend of Mahāyāna Buddhist interconnectedness, ecological systems thinking and deep ecology philosophy. This ecophilosophy is reflected in her concept of ecological self, where a person experiences themselves as inseparable from the ecological network of the natural environment. Instead of the bioregional lifestyle emphasis of Snyder, Macy has stressed the utility of meditative and emotional practices. These include a practice called the Council of All Beings where members of a group of practitioners take turns to identify

<sup>&</sup>lt;sup>8</sup> The contemporary definition of Sangha as encompassing all Buddhist practitioners is wide relative to the traditional meaning of monastic community.

and speak on behalf of another life form, which can also be an ecological feature such as a swamp and may have experienced damage from human activity (e.g., endangered animal species or logged forest). The practices developed by Macy are directed not only at developing a tangible sense of (inter)connectedness with the natural environment but also at connecting with the emotional pain of environmental degradation whose avoidance may otherwise obstruct environmental activism.

Macy has also developed the concept of Ecosattva, an ecological extension of the Mahāyāna Buddhist concept of Bodhisattva, an ideal practitioner who out of compassion vows to work to relieve endless suffering and help countless beings until all sentient beings have reached the shore of enlightenment. The Ecosattva extends this vow to the well-being of the whole Earth and its ecosystems based on the insight of the deep interconnectedness of all living and non-living phenomena. Macy has held workshops on these practices across the world, including for White House staff, as well as having authored several influential books on the theme (Kaza 2003, 2006; Kraft 1994; Macy 2009.; Pihkala 2020; Strain 2016). She is widely considered a pioneer in the fields of deep ecology, environmental emotions, and environmental education.

West Coast Buddhist centers adopting conservationist and environmental sustainability practices early on include Green Gulch Zen Center and Spirit Rock (Kaza 1997; Kraft 1994). Snyder's Zen community in the Sierra Mountain foothills and Zen Mountain Monastery in the East Coast (state of New York), founded by John Daido Loori, in turn, integrated hiking in the wilderness and nature observation into a Buddhist meditation retreat setup (Kaza 2006).

An important academician studying and debating these developments is U.S. scholar Stephanie Kaza, a student of Joanna Macy as well as a notable scholar in her own right. Kaza has focused on describing Western Buddhist ecophilosophies and environmental activism as well as their

positive albeit limited potential for counteracting the global environmental crisis (e.g. Kaza 1997, 2003, 2006, 2018). British scholar Ian Harris and German scholar Lambert Schmithausen, in turn, have criticized the emergent ecophilosophies, including those by Snyder and Macy, for lacking a sufficiently direct and strong foundation in traditional Buddhist doctrine (Harris 1995; Schmithausen 1997). Harris characterizes them as creative cocktails of West Coast eclectic spirituality, deep ecology, and selectively chosen and reinterpreted Buddhist elements (Harris 1995). U.S. scholar Donald Swearer has taken a birds-eye perspective on the entire discussion, attempting to systematize all the different approaches, including both non-academic and academic, as well as among the latter, different types of critical approaches (Swearer 2006).

Particularly since the 1980s, Asian societies have also faced practical environmental consequences from overexploitation of natural resources and environmental degradation, which has led to reactions by local Buddhist actors. One specific feature of the Asian response is that it has also concerned threats to the lifestyles of forest-dwelling monastics as well as temples and landscapes considered to be sacred to Buddhism, unlike the West lacking such characteristics of traditional Buddhist societies (Cho 2013; Darlington 2003). Before the 1990s, Asian Buddhist environmentalism was largely in opposition to state developmental policies and was relatively weak, since in most Asian Buddhist countries the Buddhist institution is either politically conservative or under strict state control. In Asia, Buddhism is predominantly considered an aspect of traditional culture and the establishment, with a strong support base among the elderly and politically conservative, while in the West Buddhism has attracted followers from politically progressive counterculture thinkers and practitioners of eclectic spirituality. Despite these general trends, it is important to note that the environmental issues across Asia in this decade varied significantly based on degrees of development. Moreover, how different governments, societies, and sanghas responded differed based on political situations and perspectives. Some of these regional responses are described in more detail below. Overall, it is important to note that among some 500 million Buddhists globally today, ninety-nine percent live in Asia. Buddhists exceed one percent of the population in very few Western countries (PRC 2012). Asian Buddhists are therefore critical to consider when assessing the environmental ideologies, attitudes, and behaviors in Buddhism.

One of the best-known cases of early Asian Buddhist environmentalism is the tree ordination ceremonies carried out since 1988 by the socalled environmental monks of Thailand. The practice has spread across the Theravada Buddhist world, and similar ceremonies have now been conducted also in Cambodia, Laos, Myanmar, and Sri Lanka. During intensive economic development starting in the 1960s, Thailand suffered largescale forest loss due to logging for export, and the life conditions of rural people failed to improve in par with the rest of the society. A few Buddhist monks in the forest tradition inhabiting remote rural areas experienced both these factors negatively affecting their surroundings and local community served by their temples, as well as their own traditional forestbased ascetic-meditative lifestyle, and they started to develop different kinds of solutions to address the problems. The solutions have included, among others, environmental awareness education for the local community, integrative and subsistence farming to promote environmentally and economically sustainable lifestyles, reforestation, and creating forest and fish sanctuaries. In these contexts, the monks have creatively drawn from the collective, symbolic, and performative significance of various Buddhist rituals and customs, most notably, ordination of elder trees in forests intended for protection by wrapping a monk's robe around the tree. The ecophilosophies of these monks have highlighted the importance of forests to the historical Buddha during his life. They have also stressed the benefit of observing basic Buddhist ethical precepts (not killing, stealing, committing adultery, lying, or using intoxicants) to diminish excessive craving that underlies environmentally and economically unsustainable modes of human behavior (Darlington 2003, 2017, 2019a, 2019b; Kaufman & Mock 2014; Strain 2016.).

One important development in Asian Buddhist environmentalism is the Green Tibet movement that developed as part of the larger Tibet movement and the international activities of the Dalai Lama. In the Green Tibet ideology, Tibetans are described as having lived in harmony with nature under the auspices of peaceful and eco-friendly Buddhist rule prior to the Chinese occupation in 1959. In his Nobel award speech in 1989, the Dalai Lama proposed the Tibetan plateau be designated an international nature reserve. Owing to these factors, a close connection was forged between the Tibet movement and the international environmental movement. The image of past Tibet promoted by the Green Tibet movement has been criticized for historical inaccuracy. The movement has nonetheless had an empowering effect on the revival of Tibetan culture following the relaxation of cultural oppression by the Chinese authorities during the 21st century (Gaerrang 2017; Woodhouse et al. 2015).

A common feature of both Western and Asian Buddhist ecophilosophies developed between the 1960s and 1990s is an opposition to prevalent political and developmental ideologies and practices. In the West, the ecophilosophies and related practices were connected to the counterculture movement and progressive politics, and integrated key ideas developed within deep ecology with different Buddhist drawn influences. In Asia, they were connected to local and ethnic concerns regarding the negative effects of new foreign cultural and developmental forces, with the negative effects on people and the environment being seen as strongly interwoven. Buddhism was thought to intrinsically enable living in harmony with nature based on different traditional teachings and practices

<sup>&</sup>lt;sup>9</sup> The first mention of making Tibet into a nature reserve as part of a five-point peace plan was already in 1987 in Washington in a speech to the U.S. Congress (Gyatso 1987).

(e.g. compassion for Tibetan Buddhism and ethical precepts for Theravāda Buddhism), and lack of such harmony was considered a sign of either external destruction of Buddhism or internal moral degradation of adherents. By evoking imagery regarding the premodern environment-friendliness of the local form of Buddhism, Asian Buddhist environmentalism was also involved in the construction of religious nationalist ideology. Nevertheless, during this phase, both Western and Asian Buddhist environmentalism were opposition movements to dominant economic and developmental regimes, as well as new and marginal movements within the wider Buddhist world. As such, their overall influence on Buddhist environmental ideologies, attitudes and practices was still relatively limited. In the wider Buddhist environmental ideologies, attitudes and practices was still relatively limited.

# Development of Environmentalism into Dominant Paradigm and Competitive Asset

The international environmental movement in its current form took shape in the early 1990s with the emergence of widespread political awareness of human-impacted climate change and sustainable development ideology. In 1992, the UN held the Earth Summit in Rio de Janeiro issuing the Convention on Climate Change, which was extended into the Kyoto Protocol in 1997. Climate change awareness has increased during the 21st century particularly owing to reports by the Intergovernmental

 $<sup>^{10}</sup>$  For the wider context regarding environmentalism emerging as a counterculture movement, see, e.g., Radkau 2014.

<sup>&</sup>lt;sup>11</sup> The early 1990s saw the acknowledgement of climate change and the need for sustainable development by global political leaders together with a shift in public environmental awareness. Nevertheless, the international environmental movement should not be understood as a fully unified and synchronous global movement, as environmentalism has carried and continues to carry different meanings and actions in various cultural and political contexts.

Panel on Climate Change (IPCC, created under UN in 1988), especially reports from 2007 and 2014. The forecasts of IPCC based on large-scale scientific consensus demonstrate considerable environmental, societal, and economic threats in the following decades without drastic restrictions in carbon emission primarily caused by use of fossil fuels which widely reflects human natural resource use and consumption activities.

Gradual political acknowledgement of these threats has led to a situation, particularly within the last decade, where international organizations, states, and large corporations are increasingly committing to major climate goals. There are efforts to replace previous dominant socioeconomic ideology based on overexploitation of natural resources by developmental ideologies based on environmental sustainability. This includes discussion of replacing economic models based on constant growth with alternative models. Nevertheless, contentions and counter-movements continue to occur around the greening trend.

The international developments have led to a new phase in Buddhist views and practices regarding the environment as Buddhists have been increasingly exposed to environmentalism, which has become more mainstream rather than being restricted to counterculture and opposition movements. In this new era, Buddhist organizations have had to engage in environmentalist discussions and develop sustainability and climate change mitigation agendas just as other organizations in society. There are even cases where Buddhist groups have experienced external political pressure to develop environmental agendas. More generally, in the new atmosphere, such agendas and related ideologies can bring Buddhist groups image benefits and therefore a competitive advantage in the religion market. There is a blurry line between the second and third phase, with some third-phase developments arising already in the mid-1990s and an increasing number of signs indicating a shift from the second to third phase in more recent years. Nevertheless, the global political and

scientific acknowledgement of climate change and need for sustainable development in the 1992 UN Earth Summit represents an important demarcation point laying the foundation for these third-phase developments. In the following, I will present several cases illustrating such contemporary Buddhist environmental action, assessing its relationship to earlier ecophilosophies in terms of scale of impact and relationship to society and politics.

China, for example, has within the previous decade adopted environmental sustainability as a key national policy goal (Meinert 2013). This is also seen in the treatment of Buddhist ethnic minorities (Zeng 2019). The development of the Tibetan plateau is no longer as strongly focused on exploitation of the natural resources in the region as before, but in addition nature preserves have been created, environmental regulation imposed, and ecotourism developed in the region. Tibetan Buddhists are allowed and even encouraged to follow their traditional lifestyle to the degree it adheres to the newfound state policies, which has facilitated the revival of local Tibetan Buddhist culture. In this context, the Green Tibet movement has shifted from a Chinese state opposition movement to strategic state policy alignment (Gaerrang 2017; Woodhouse et al. 2015).

Potentially owing to early connections between the Tibet movement and the environmental movement, environmental awareness can be high among educated Tibetan monastics, which is also reflected in practice. For instance, the head of the Tibetan Buddhist Karma Kagyu lineage, Karmapa Ogyen Trinley Dorje, has even written into a scientific journal about the international and Tibetan environmental crisis. Over forty Kagyu monasteries across the Himalayas carry out a variety of environmental projects in collaboration with international environmental organizations on a wide range of topics spanning from forest loss and water shortage to pollution and climate change (Gleig 2021; Karmapa 2011). The Tibetan Buddhist country of Bhutan, in turn, has sought to replace a GDP

based economic model with a Gross National Happiness (GNH) based economic model, and as environmental awareness has increased, an increasing number of environmental policies have been assimilated into the GNH model (Haluza-DeLay 2014).<sup>12</sup>

Starting from the mid-1990s, the politically conservative prominent Buddhist organizations in Japan have started to promote environmental sustainability practices in tens of thousands of temples and environmental awareness campaigns directed at their lay membership. The policies include efficient use of water and energy as well as recycling. The best-known example is the Green Plan of the Sōtō Zen school, representing over 15,000 temples. As part of these projects, Buddhism is described as inherently compatible with contemporary conservation and sustainability goals, with reference made to Mahāyāna Buddhist concepts such as the presence of Buddha nature in all living and non-living phenomena, thought to have enabled Japanese Buddhists to live in harmony with nature (Dessì 2017; Williams 2012). Because of the conservative nature of the Buddhist institutions, environmental policies are likely to hold different meanings to them compared to Western politically progressive Buddhist organizations. It has been suggested that environmental policies represent for them a means for legitimizing their existence in light of current social concerns, creating a positive public image and competitive advantage among other religious and secular ideologies in the religion market, and even promoting religious nationalism (Dessì 2017).

The largest Buddhist organization of Taiwan, Tzu-Chi, whose two to three million members represent over ten percent of the population, has especially since Hurricane Katrina (US) in 2005 emphasized climate conscious practices. Climate awareness emerged in the politically conservative organization participating in international catastrophe relief

 $<sup>^{12}</sup>$  Notably, the GNH model of Bhutan has been criticized for lacking a rigorous scientific basis, although more recently, efforts have been made to build one (e.g., Fishman 2010).

work owing to the increased occurrence of hurricanes. This involved cooperation with other international organizations concerned about climate change. Interestingly, in addition to Buddhist ideological influences, the Confucian concept of self-restraint takes center stage in Tzu-Chi environmental philosophy. A key practical consequence has been the initiation of large-scale recycling activity. In Taiwan, the organization maintains five thousand recycling stations with over 200,000 regular volunteers (Lee & Han 2015). Indeed, today Buddhists in Taiwan engage in environmental practices more compared to other religions (Lee & Han 2021).

In Vietnam, in turn, the state has used the temple network of the Unified Buddhist Church to enact a large-scale environmental education campaign, in which context Buddhism is described as inherently environmentally friendly (Nhat 2019). Concerning other parts of Southeast Asia, an environmental awareness publication published in Thailand in 1987 has been strongly readapted to local conditions and published in Cambodia in 1999 and in Laos in 2005. The version of the publication in Laos includes quotations from leading international Buddhist figures such as the Dalai Lama and Thich Nhat Hanh (Darlington 2018). This is one example illustrating how environmental awareness is also becoming increasingly mainstream in this region.

The cases described above show that in the current changed societal and political atmosphere, Buddhist actors in Asia are increasingly experiencing public image benefits from environmental practices and can even be subject to governmental control to promote environmental policies. Religious actors have also been increasingly engaging with environmental issues through inter-religious cooperation where climate change, in particular, has become a hot topic. In 2014, the UN Framework Convention on Climate Change (UNFCCC) launched the Interfaith Summit on Climate Change. In 2017, the UN Environmental Programme (UNEP) launched the broader Faith for Earth initiative to encourage members of

faith-based organizations to collaborate on environmental issues. In these and other context, several interreligious statements have been made regarding climate change and other environmental issues.

The phenomenon of increasing interest in climate change and environmental issues within and between religions can also be seen in the Buddhist circles in the West both as the increasingly mainstream embracing of ecophilosophies and as the development of radical, or dark green, ecology. One representative of radical ecology is philosophy professor and Zen practitioner David Loy who argues that Buddhists need to take stronger responsibility for their ecological footprint as an existential issue. Loy criticizes Buddhists for overtly focusing on otherworldly goals, such as enlightenment or a better rebirth, or on maximizing personal psychophysical well-being (e.g., mindfulness movement) at the expense of caring for the state of the world (Loy 2018). Loy has founded the Rocky Mountain EcoDharma Retreat Center seeking to develop radical ecology in practice, similar to another center, the Ecodharma Center, located in the Pyrenee Mountains in Spain and founded by Guhyapati, a member of the Western Buddhist Triratna organization.

Western Buddhists have also engaged with the new climate movement and participated in an organized fashion in climate protests. Examples include the originally UK based Extinction Rebellion Buddhists group, which has subsequently grown into an international network, and the Buddhist Action Coalition NYC organization operating in New York City (Gleig 2021). Notably, the need to protect the environment and mitigate climate change may also arise for Buddhist actors in Asia, as well as the West, for reasons unrelated to Buddhism such as climate change threatening their life conditions and livelihoods. Therefore, not all environmentalism by Buddhists today should be considered Buddhist environmentalism.

#### Discussion

I have identified major historical developments in the Buddhist stance on the environment with respect to current conservationist and sustainability concepts and concerns. From this I propose a novel diachronic typology of the Buddhist stances on the environment. The first premodern phase lasted until the environmental awakening of the 1960s and consisted of a mixed bag of views and behaviors regarding current ecological concepts and concerns. The second phase started in the 1960s particularly as a counterculture movement in the global North and consisted of the development of early Buddhist inspired ecophilosophies that had a relatively minor impact on Buddhist views and practices on a global scale. The foundation for the third phase was laid in the early 1990s, although the phase has started at different times in different geopolitical regions and Buddhist organizations and the transition is still underway. It consists of the mainstream adoption of ecophilosophies and environmental agendas and practices by Buddhist organizations across the globe. In the new era, Buddhist environmentalism is no longer restricted to marginal or counterculture movements but can produce general image benefits and even be propelled by governmental pressure.

After the environmental awakening in the 1960s and 1970s, non-Buddhist and Buddhist actors alike, particularly in the West, began to draw on conservationist and sustainability motives in Buddhism to promote ideologies and life modes less destructive and more sustainable compared to prevailing models. These interpretations occasionally entailed simplistic and naïve claims about the Buddhist stances overlooking the historical heterogeneity of beliefs and practices. Already in his landmark *Science* paper, Lynn White (1967) describes the man-nature relationship in Zen Buddhism "as very nearly the mirror image of the Christian view," the latter being described as a dualism between man and nature where it is God's will for man to exploit nature.

Nevertheless, such simplistic interpretations of Buddhist environmental stances could also serve or intentionally represent constructive and creative use of Buddhist elements to find solutions to current problems. In the initial decades, the ecophilosophies and related practices were promoted by counterculture and opposition figures, with limited influence in the Buddhist world. However, particularly with the growing global political recognition of anthropogenic climate change and the unsustainability of the dominant socioeconomic system during the 1990s, a development accelerated in recent decades due to the impending climate crisis, Buddhist environmentalism started to shift from an opposition movement to mainstream paradigm alignment. This shift, which is still in progress, has also entailed the emergence of a new type of opposition movement: radical, or dark green, Buddhist ecology.

Several features of the Buddhist tradition may obstruct effective action as an opposition movement. In addition to the factors listed above contributing to lack of care for the state of the world, namely, focus on otherworldly or personal goals, these include doctrinal elasticity (as opposed to emphasis on literal doctrinal interpretations and sets of dogmas), stressing the danger of attachment to views and craving for specific worldly outcomes; avoidance of aspects typical of confrontation situations, such as speaking or acting upon anger and situations that may trigger anger, and promoting social harmony.

Because of such features Buddhism has been able to flexibly adapt to various social settings and coexist with diverse belief systems and life modes during its 2,500-year history. Nevertheless, the same aspects have also made Buddhism relatively passive in addressing social issues compared to the Abrahamic religions with a strong history of social involvement and addressing injustice (Hudson 2014; Kaza 2006; Kraft 1994; Krantz 2021; Loy 2018). These factors may also explain, in part, why the early Buddhist response to the environmental crisis was fragmentary, marginal,

and largely promoted by Western progressive figures who also held a cultural background of individualism and activism. However, now that environmentalism is gradually becoming a dominant social paradigm across the world, these same features in Buddhism may explain why environmentalism has been widely embraced even by many conservative Asian Buddhist actors compared to a more heterogeneous response among, for example, Evangelical Christians.

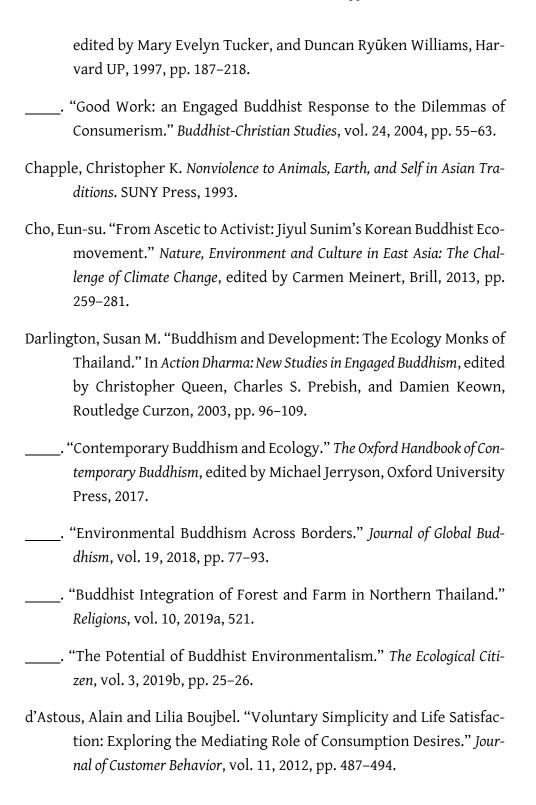
Although Buddhism is still in the process of greening, the current trend indicates a high potential for continued embracing of ecophilosophies and related practices (see e.g. Dessì 2017; Haluza-DeLay 2014; Koehrsen & Huber 2021; Morrison et al. 2015; Williams 2012.). The future of radical green Buddhism remains less clear, as it continues the tradition of opposition environmentalism but is still likely to grow with the growth of general environmentalism.

The increasing greening of Buddhism also calls for heightened concern over its potential repercussions for the religion. For instance, Ugo Dessì (2017) has argued that if current ecological concepts and concerns are allowed to dominate how we see the human-nature relationship in Buddhism, this may lead to a lack of appreciation of alternative ways of framing this relationship occurring in Buddhist history. Such diverse ways of approaching nature can be seen as an important part of the Buddhist contribution to human cultural diversity.

#### **Works Cited**

Anker, Peder. The Power of the Periphery: How Norway Became an Environmental Pioneer for the World. Cambridge UP, 2020.

Barnhill, David L. "Relational Holism: Huayan Buddhism and Deep Ecology." Buddhism and Ecology: the Interconnection of Dharma and Deeds,



- Dessì, Ugo. "Japanese Buddhism, Relativization, and Glocalization." *Religions*, vol. 8, 2017, p. 12.
- Esler, Joshua. "Green Tibetans' in China: Tibetan Geopiety and Environmental Protection in a Multilayered Tibetan Landscape." *Asian Ethnicity*, vol. 18, 2017, pp. 330–350.
- Fishman, Ram Mukul. 2020. "Gross National Happiness—A Real Alternative or a Romantic Wish? Impressions from the Fourth International Conference on Gross National Happiness in Bhutan." *Consilience*, vol. 3, 2020, pp. 179–186.
- Gaerrang, Kabzung. "Tibetan Buddhism, Wetland Transformation, and Environmentalism in Tibetan Pastoral Areas of Western China." *Conservation & Society*, vol. 15, 2017, pp. 14–23.
- Gleig, Ann. "Engaged Buddhism." Oxford Research Encyclopedia of Religion, Oxford UP, https://doi.org/10.1093/acrefore/9780199340378.013.755, Published 28 June 2021.
- Greene, Eric M. "A Reassessment of the Early History of Chinese Buddhist Vegetarianism." *Asia Major*, vol. 29, 2016, pp. 1–43.
- Gregg, Richard B. "Voluntary Simplicity." *The MANAS Journal*, 1936, edited 4 September 1974, http://www.manasjournal.org/pdf\_library/VolumeXXVII\_1974/XXVII-36.pdf, Accessed 9 February 2024.
- Gyatso, Tenzin. "Five Point Peace Plan." Address to the U.S. Congressional Human Right's Caucus, September 21, 1987, The Office of His Holiness The Dalai Lama, <a href="http://www.dalailama.com/messages/tibet/five-point-peace-plan">http://www.dalailama.com/messages/tibet/five-point-peace-plan</a>, Accessed 9 February 2024.

- Haluza-DeLay, Randolph. "Religion and Climate Change: Varieties in Viewpoints and Practices." WIREs Climate Change, vol. 5, 2014, pp. 261–279.
- Harris, Ian. "Causation and Telos: The Problem of Buddhist Environmental ethics." *Journal of Buddhist Ethics*, vol. 1, 1994, pp. 46–59.
- \_\_\_\_\_. "Buddhist Environmental Ethics and Detraditionalization: The Case of EcoBuddhism." *Religion*, vol. 25, 1995, pp. 199–211.
- Henning, Daniel H. Buddhism and Deep Ecology. AuthorHouse, 2002.
- Hook, Joshua N., et al. "Minimalism, Voluntary Simplicity, and Well-being: a Systematic Review of the Empirical Literature." *The Journal of Positive Psychology*, 2021.
- Huber, Toni. "Traditional Environmental Protectionism in Tibet Reconsidered." *The Tibet Journal*, vol. 16, 1991, pp. 63–77.
- . "The Chase and the Dharma: The Legal Protection of Wild Animals in Pre-modern Tibet." Wildlife in Asia: Cultural Perspectives, edited by John Knight, RoutledgeCurzon, 2003, pp. 36–55.
- Huber, Toni and Poul Pedersen. "Meteorological Knowledge and Environmental Ideas in Traditional and Modern Societies: The Case of Tibet." *The Journal of the Royal Anthropological Institute*, vol. 3, 1997, pp. 577–597.
- Hudson, Mark J. "Placing Asia in the Anthropocene: Histories, Vulnerabilities, Responses." *The Journal of Asian Studies*, vol. 73, 2014, pp. 941–962.
- Jenkins, Willis. Ecologies of Grace: Environmental Ethics and Christian Theology.
  Oxford UP, 2008.

- Karmapa, Ogyen T. D. "Walking the Path of Environmental Buddhism Through Compassion and Emptiness." *Conservation Biology*, vol. 25, 2011, pp. 1094–1097.
- Kaufman, Alexander H. and Jeremiah Mock. "Cultivating Greater Well-being: The Benefits Thai Organic Farmers Experience from Adopting Buddhist Eco-spirituality." *Journal of Agricultural and Environmental Ethics*, vol. 27, 2014, pp. 871–893.
- Kaza, Stephanie. "American Buddhist Response to the Land: Ecological Practice at Two West Coast Retreat Centers." Buddhism and Ecology: the Interconnection of Dharma and Deeds, edited by Mary Evelyn Tucker and Duncan Ryūken Williams, Harvard UP, 1997, pp. 219–248.
- \_\_\_\_\_. "Buddhist Environmental Ethics: An Emergent and Contextual Approach." *The Oxford Handbook of Buddhist Ethics*, edited by Daniel Cozort and James Mark Shields, Published 5 April 2018, https://doi.org/10.1093/oxfordhb/9780198746140.013.17, Accessed 9 February 2024.
- . "To Save All Beings: Buddhist Environmental Activism." In *This Sacred Earth: Religion, Nature, Environment*, edited by Roger S. Gottlieb, 2nd edition, Routledge, 2003, pp. 266–314.
- \_\_\_\_\_. "Western Buddhist Motivations for Vegetarianism." *Worldviews*, vol. 9, 2005, pp. 385–411.
- . "The Greening of Buddhism: Promise and Perils." *The Oxford Handbook of Religion and Ecology*, edited by Roger S. Gottlieb, Oxford UP, 2006, pp. 184–206.
- Koehrsen, Jens and Fabian Huber. "A Field Perspective on Sustainability Transitions: The Case of Religious Organizations." *Environmental Innovation and Societal Transitions*, vol. 40, 2021, pp. 408–420.

- Kraft, Kenneth. "The Greening of Buddhist Practice." *CrossCurrents*, vol. 44, 1994, pp. 163–179.
- Krantz, David. "COP and the Cloth: Quantitatively and Normatively Assessing Religious NGO Participation at the Conference of Parties to the United Nations Framework Convention on Climate Change." *Sci*, vol. 3, 2021, p. 24.
- Kvaløy, Sigmund. "Norwegian Ecophilosophy and Ecopolitics and Their Influence from Buddhism." *Buddhist Perspectives on the Ecocrisis*, edited by Klas Sandell, Buddhist Publication Society, 1987, pp. 49–72.
- Lee, Chengpang and Ling Han. "Recycling Bodhisattva: The Tzu-Chi Movement's Response to Global Climate Change." *Social Compass*, vol. 62, 2015, pp. 311–325.
- \_\_\_\_\_. "Taiwanese Buddhism and Environmentalism: A Mixed Method Study." Review of Religion and Chinese Society, vol. 9, no. 1, 2021, pp. 44-69.
- Loy, David R. Ecodharma: Buddhist Teachings for the Precipice. Wisdom, 2018.
- Macy, Joanna. "The Ecological Self." *Buddhist Philosophy: Essential Reading*, edited by William Edelglass and Jay Garfield, Oxford UP, 2009, pp. 428–436.
- Meinert, Carmen. "Introduction: Climate and Culture in East Asia." In Nature, Environment and Culture in East Asia: The Challenge of Climate Change, edited by Carmen Meinert, Brill, 2013, pp. 1–20.
- Morrison, Mark, et al. "Religion Does Matter for Climate Change Attitudes and Behavior." *PLoS ONE*, vol. 10, 2015, e0134868.
- Nash, Roderick F. *The Rights of Nature: A History of Environmental Ethics*. U of Press, 1989.

- Næss, Arne. "The Shallow and the Deep, Long-range Ecology Movement: A Summary." *Inquiry*, vol. 16, 1973, pp. 95–100.
- Nhat, Pham Cong. "The Role of Buddhism in Environmental Protection and Sustainable Development in Vietnam Today." *International Journal of Humanities Social Sciences and Education*, vol. 6, 2019, pp. 74–82.
- Osikominu, Jessica and Nancy Bocken. "A Voluntary Simplicity Lifestyle: Values, Adoption, Practices and Effects." *Sustainability*, vol. 12, 2020, 1903.
- Pihkala, Panu. "Eco-anxiety and Environmental Education." *Sustainability*, vol. 12, 2020, 10149.
- PRC. "The Global Religious Landscape." *Pew Research Center*, Published 12 December 2012, http://www.pewforum.org/2012/12/18/global-religious-landscape-exec/, Accessed 9 February 2024.
- Radkau, Joachim. *The Age of Ecology*, John Wiley & Sons, 2014.
- Rebouças, Raquel and Ana Maria Soares. "Voluntary Simplicity: A Literature Review and Research Agenda." *International Journal of Consumer Studies*, vol. 45, 2021, pp. 303–319.
- Schmithausen, Lambert. "The Early Buddhist Tradition and Ecological Ethics." *Journal of Buddhist Ethics*, vol. 4, 1997, pp. 1–74.
- Schumacher, E. F. Small is Beautiful: Economics as if People Mattered. Blond & Briggs, 1973.
- Sciberras, Colette. "Buddhism and Speciesism: On the Misapplication of Western Concepts to Buddhist Beliefs." *Journal of Buddhist Ethics*, vol. 15, 2008, pp. 215–240.

- Sigālovāda. "Sigalovada Sutta: The Discourse to Sigala (DN 31)." Access to Insight, translated by Narada Thera, Published 30 November 2013, http://www.accesstoinsight.org/tipitaka/dn/dn.31.0.nara.html, Accessed 9 February 2024.
- Smyer Yü, Dan. "Sentience of the Earth: Eco-Buddhist Mandalizing of Dwelling Place in Amdo, Tibet." *Journal for the Study of Religion, Nature and Culture*, vol. 8, 2014, pp. 483–501.
- Sørensen, Henrik H. "Of Eco-Buddhas and Dharma-roots: Views from the East Asian Buddhist Tradition." *Nature, Environment and Culture in East Asia: The Challenge of Climate Change*, edited by Carmen Meinert, Brill, 2013, pp. 83–105.
- Strain, Charles R. "Reinventing Buddhist Practices to Meet the Challenge of Climate Change." *Contemporary Buddhism*, vol. 17, 2016, pp. 138–156.
- Swearer, Donald K. "An Assessment of Buddhist Eco-philosophy." *Harvard Theological Review*, vol. 99, 2006, pp. 123–137.
- White, Lynn Jr. "The Historical Roots of Our Ecologic Crisis." *Science*, vol. 155, 1967, pp. 1203–1207.
- Whitney, Elspeth. "The Lynn White Thesis: Reception and Legacy." *Environmental Ethics*, vol. 35, 2013, pp. 313–331.
- Williams, Duncan R. "Buddhist Environmentalism in Contemporary Japan." *Handbook of Contemporary Japanese Religions*, edited by Inken Prohl and John Nelson, Brill, 2012, pp. 373–392.
- Woodhouse, Emily, Martin A. Mills, Philip J. K. McGowan, and E. J. Milner-Gulland. "Religious Relationships with the Environment in a Tibetan Rural Community: Interactions and Contrasts with Popular

Notions of Indigenous Environmentalism." *Human Ecology*, vol. 43, 2015, pp. 295–307.

Zeng, Lily. "Dai identity in the Chinese Ecological Civilization: Negotiating Culture, Environment, and Development in Xishuangbanna, Southwest China." *Religions*, vol. 10, 2019, p. 646.